

IN THE CLAIMS:

- 1 1. (Previously presented) A computerized data file system, comprising:
2 a first process that maintains a data file stored in a computer-readable memory; and
3 a second process that generates a first message requesting that said second process be
4 granted by said first process a plurality of tokens required for said second process to modify
5 at least one characteristic of said file stored in said computer-readable memory;
6 said first process generating a second message, in response to said first message, that
7 grants said tokens to said second process if said tokens are available for grant to said second
8 process.
- 1 2. (Original) A system according to claim 1, wherein:
2 said first process is resident at a server computer node, and said second process is
3 resident at a client computer node.
- 1 3. (Original) A system according to claim 1, wherein:
2 if any of said tokens are unavailable for grant to said second process as a result of
3 current grant of said tokens to at least one other process, said first process generates a third
4 message revoking the current grant of said tokens to said at least one other process.
- 1 4. (Original) A system according to claim 3, wherein:
2 said at least one other process, in response to said third message, generates a fourth
3 message making said tokens available for grant by said first process.
- 1 5. (Original) A system according to claim 3, wherein:
2 said first process resides in a first computer node;
3 said second process resides in a second computer node;
4 said at least one other process resides in at least one other computer node; and
5 said first computer, second computer, and at least one other computer nodes are
6 networked together and are remote from each other.

- 1 6. (Previously presented) A computer node, comprising:
2 a first process residing in said node that generates a first message that grants a set of
3 tokens, if the set of tokens is available for grant, to a second process that requested grant of
4 the set of tokens, the set of tokens being required for the second process to be able to modify
5 at least one characteristic of a file stored in a computer-readable memory within the computer
6 node.
- 1 7. (Previously presented) A node according to claim 6, wherein:
2 the second process resides in a remote computer node.
- 1 8. (Previously presented) A node according to claim 7, wherein:
2 one of the first and second processes resides in a server computer node and the other
3 of the processes resides in a client computer node.
- 1 9. (Original) A node according to claim 6, wherein:
2 if at least one token in the set of tokens is unavailable for grant because the at least
3 one token is currently granted to a third process, the first process also generates a second
4 message that revokes current grant of the at least one token to the third process prior to
5 generating the first message.
- 1 10. (Original) A node according to claim 6, wherein:
2 the first message is generated by the first process in response to a request for the grant
3 of the set of tokens generated by the second process, the request specifying all tokens
4 required for the second process to be able to modify the at least one characteristic of the file.
- 1 11. (Previously presented) A computer node, comprising:
2 a first process residing in said node that generates a request to a second process for
3 grant of a set of tokens required to enable the first process to modify at least one
4 characteristic of a file residing in a remote computer-readable memory.

- 1 12. (Original) A node according to claim 11, wherein:
2 the second process resides in a second computer node, and the memory is comprised
3 in said second node.
- 1 13. (Original) A node according to claim 11, wherein:
2 the set of tokens comprises all tokens required for the first process to be able to
3 modify the at least one characteristic of the file.
- 1 14. (Previously presented) A network computer system, comprising:
2 a first computer node having a data file stored in a computer-readable memory; and
3 a second computer node that issues to the first computer node a first message
4 requesting grant of a set of tokens required to carry out a modification of at least one
5 characteristic of said file stored in the first computer node;
6 the first computer node issuing a second message to the second computer node after
7 receipt of the first message, the second message granting the set of tokens to the first process
8 if the set of tokens is available for grant to the second process.
- 1 15. (Previously presented) A system according to claim 14, wherein:
2 the first computer node is a server node, and the second computer node is a non-
3 server node.
- 1 16. (Previously presented) A system according to claim 14, wherein:
2 the set of tokens comprises all tokens required to carry out the modification of the at
3 least one characteristic of the file.
- 1 17. (Previously presented) A system according to claim 14, wherein:
2 if at least one token in the set of tokens is unavailable for the grant because the at
3 least one token is currently granted, the first computer node waits to issue the first message
4 until after the first computer node receives a third message from a third computer node
5 indicating relinquishment of current grant of the at least one token.

1 18. (Previously presented) A system according to claim 17, wherein:

2 the at least one token comprises a plurality of tokens.

1 19. (Currently amended) Computer-readable memory containing computer-executable
2 program instructions, the instructions comprising:

3 first instructions ~~which when executed permit a data file to be maintained~~ generating a data
4 file in a computer storage memory;

5 second instructions ~~which when executed generate~~ ing a first message requesting grant
6 of a plurality of tokens required to modify at least one characteristic of said file located in
7 said computer storage memory; and

8 third instructions ~~which when executed generate~~ ing a second message, in response to
9 said first message, that grants said tokens if said tokens are available for grant to said second
10 process.

1 20. (Currently amended) Computer-readable memory containing computer-executable
2 program instructions, the instructions comprising:

3 first instructions ~~which when executed generate~~ ing a first message that grants a set of
4 tokens, if the set of tokens is available for grant, to a requester of the set of tokens, the set of
5 tokens being required to permit the requester to be able to modify at least one characteristic
6 of a file stored in computer storage memory.

1 21. (Currently amended) Computer-readable memory containing computer-executable
2 program instructions, the instructions comprising:

3 first instructions ~~that when executed generate~~ ing a request for grant of a set of tokens
4 required to enable modification by an issuer of the request of at least one characteristic of a
5 file residing in storage memory.

1 22. (Currently amended) Computer-readable memory according to Claim 19, further
2 comprising:

3 further instructions ~~which when executed causes, if any of said tokens are unavailable~~
4 for grant as a result of current grant of said tokens, generation ing of a third message, if any of

5 said tokens are unavailable for grant as a result of a current grant of said tokens, revoking the
6 current grant of said tokens.

1 23. (Previously presented) A computer-readable memory according to claim 22, wherein:
2 said further instructions, in response to said third message, generate a fourth message
3 making said tokens available for grant.

1 24. (Currently amended) Computer-readable memory according to claim 20, further
2 comprising:
3 further instructions ~~which when executed cause, if at least one token in the set of~~
4 ~~tokens is unavailable for grant because the at least one token is currently granted,~~
5 generating of a second message, if at least one token in the set of tokens is unavailable for
6 grant because the at least one token is currently granted, that revokes previous grant of the at
7 least one token prior to generating the first message.

1 25. (Previously presented) Computer-readable memory according to claim 20, wherein:
2 the first message is generated in response to a request for the grant of the set of tokens
3 generated, the request specifying all tokens required to be able to modify the at least one
4 characteristic of the file.

1 26. (Previously presented) Computer-readable memory according to claim 21, wherein:
2 the set of tokens comprises all tokens required to be able to modify the at least one
3 characteristic of the file.

1 27. (Previously presented) A computerized data file system, comprising:
2 means for maintaining a data file stored in a computer-readable memory; and
3 means for generating a first message requesting grant of a plurality of tokens required
4 to modify at least one characteristic of said file stored in said computer-readable memory;
5 means for generating a second message, in response to said first message, that grants
6 said tokens if said tokens are available for grant.

- 1 28. (Previously presented) A system according to claim 27, further comprising:
2 means for generating, if any of said tokens are unavailable for grant as a result of
3 current grant of said tokens, a third message revoking the current grant of said tokens.
- 1 29. (Previously presented) A system according to claim 28, further comprising:
2 means for generating, in response to said third message, a fourth message making
3 said tokens available for grant.
- 1 30. (Previously presented) A computerized method for coherently maintaining and modifying
2 a data file, comprising:
3 maintaining the data file in a computer-readable memory;
4 generating a first message requesting grant of a plurality of tokens required to modify
5 at least one characteristic of said file in said computer-readable memory; and
6 generating a second message, in response to said first message, that grants said tokens
7 if said tokens are available for grant.
- 1 31. (Previously presented) A method according to claim 30, further comprising:
2 if any of said tokens are unavailable for grant as a result of current grant of said
3 tokens to at least one other process, generating a third message revoking the grant of said
4 tokens.
- 1 32. (Previously presented) A method according to claim 31, wherein:
2 in response to said third message, a fourth message making said tokens available for
3 grant is generated.
- 1 33. (Previously presented) A computerized method for use in maintaining coherency of a
2 data file stored in a computer-readable memory, comprising:
3 generating a first message that grants a set of tokens, if the set of tokens is available
4 for grant, to a requester of the grant of the set of tokens, the set of tokens being required for
5 requester to be able to modify at least one characteristic of the file stored in the computer-
6 readable memory.

- 1 34. (Previously presented) A method according to claim 33, wherein:
2 if at least one token in the set of tokens is unavailable for grant because the at least
3 one token has been currently granted, the method also comprises a second message that
4 revokes current grant of the at least one token prior to generating the first message.
- 1 35. (Previously presented) A method according to claim 33, wherein:
2 the first message is generated in response to a request for the grant of the set of tokens
3 generated by the requester, the request specifying all tokens required for the requester to be
4 able to modify the at least one characteristic of the file.
- 1 36. (Previously presented) A computerized method for use in maintaining coherency of a
2 data file stored in a computer-readable memory, comprising:
3 generating a request for grant of a set of tokens required to enable modification of at
4 least one characteristic of the file stored in the computer-readable memory.
- 1 37. (Previously presented) A method according to claim 36, wherein:
2 the set of tokens comprises all tokens required to be able to modify the at least one
3 characteristic of the file.
- 1 38. (Previously presented) The system according to claim 1, wherein:
2 said second process, in response to receiving said second message, modifies said at
3 least one characteristic of said file stored in said computer-readable memory.
- 1 39. (Previously presented) The system according to claim 27, further comprising:
2 means for modifying said at least one characteristic of said file stored in said
3 computer-readable memory.
- 1 40 (Previously presented) The method according to claim 30, further comprising:
2 modifying said at least one characteristic of said file in said computer-readable
3 memory.